

MEAN LAKE LEVELS DURING OCTOBER, 1923.

By UNITED STATES LAKE SURVEY.

[Detroit, Mich., November 5, 1923.]

The following data are reported in the "Notice to Mariners" of the above date:

Data.	Lakes. ¹			
	Superior.	Michigan and Huron.	Erie.	Ontario.
Mean level during October, 1923.....	<i>Fect.</i> 602.06	<i>Fect.</i> 579.38	<i>Fect.</i> 571.25	<i>Fect.</i> 244.65
Above mean sea level at New York.....				
Above or below—				
Mean stage of September, 1923.....	—0.04	—0.26	—0.30	—0.34
Mean stage of October, 1922.....	—0.40	—0.60	—0.63	—0.90
Average stage for October, last 10 years.....	—0.65	—1.11	—0.92	—1.17
Highest recorded October stage.....	—1.50	—3.56	—2.45	—3.16
Lowest recorded October stage.....	+0.48	—0.22	+0.45	+0.98
Average relation of October level to—				
September, level.....		—0.2	—0.3	—0.4
November, level.....		+0.2	+0.2	+0.2

¹ Lake St. Clair's level: In October, 574.19 feet.

EFFECT OF WEATHER ON CROPS AND FARMING OPERATIONS, OCTOBER, 1923.

By J. B. KINCER.

During the first week in October a cool wave overspread all States from the Ohio River northward and eastward, with heavy to killing frost generally over Pennsylvania, New Jersey, New York, the New England States and the western Lake region. The damage was not serious, however, as crops were mostly matured, although late potatoes suffered somewhat in parts of the Ohio Valley, and truck and some late corn were damaged in Ohio and Indiana, while tender vegetation was killed in Pennsylvania and New Jersey.

Another cool wave overspread the Plains States on the 13th, which brought the first killing frost of the season to districts from Kansas northward to central North Dakota, while a third at the close of the second decade extended the frost line to the lower Missouri and central Mississippi Valleys, though only little damage resulted from this as crops generally were matured.

Winter wheat seeding made good progress during the month under favorable weather conditions, except for delay by frequent rains and wet soil in the extreme lower Great Plains. At the close of the month seeding was practically finished, except in the latter area and in the north Pacific Coast States, and early-seeded wheat was up to a good stand in nearly all districts. More moisture was needed, however, in the Southeast for seeding wheat and oats and for the germination of grain.

Late corn matured rapidly during the first half of the month in the upper Mississippi and Ohio Valleys, and conditions were favorable for drying out the early crop. Rain in Oklahoma and much of Texas, however, delayed harvest, and there was some damage to corn in shock. The latter part of the month was unfavorable for drying out corn in the upper Mississippi Valley, particularly in Iowa where there was much complaint of soft and moldy corn, while fields were too wet for cribbing in Missouri.

Favorable weather for gathering cotton prevailed in the central and eastern portions of the belt, and this work made good progress. In the more western portions harvest was considerably interrupted by rainfall, and much damage was done in some places, particularly in Oklahoma, by rotting and sprouting. Picking was much delayed in the northwestern portions of the belt where the top crop was generally poor. At the close of the month picking was nearly completed in all districts, except over the northern portions of the belt, particularly in Oklahoma and northwestern Texas.

There was some damage to late truck crops by frost early in the month in Michigan, and also from the northern Ohio Valley States eastward, while at the same time gardens and minor crops needed rain badly in the Southeastern States.

Rainfall in the central Rocky Mountain area was especially beneficial to sugar beets, and this crop was in generally satisfactory condition. Pastures were poor because of lack of moisture in the Southeastern States, but the range in the Southwest was further benefited by rainfall, although it was somewhat too wet for the best curing of the range in some central Rocky Mountain districts. At the close of the month, stock were reported generally in good condition, with pastures remaining green in the central valley States.